Met Office in the Media: 29 April 2011

Description

As HRH Prince William and Catherine Middleton were married in Westminster Abbey, the showers held off, remaining to the north of central London. The cloud broke to give some sunny spells across the capital as they made their way back to Buckingham Palace in an open-top coach, leading to perfect weather for the ‘balcony moment’. Elsewhere across the UK, showers have been affecting parts of NE England and Southern Scotland. Showers are expected to develop across other parts of the UK through this afternoon, although as is the case with showers it will be ‘hit and miss’ with many places staying dry.

Richard Black at BBC News has reported on a new piece of research into the Agulhas Current flows which from the Indian Ocean into the Atlantic. in the article Met Office scientist provides comment.

Elsewhere the media have been reporting on the devastating tornadoes that have been affecting southern states of the US. The US National Weather Service has reports of nearly 300 tornadoes since the storms began on Friday, more than 150 of them on Wednesday alone. The National Weather Service’s Storm Prediction Center has said some of the tornadoes on Wednesday may have been more than a mile (1.6 km) wide with wind speeds over 200 mph (320 km/h). BBC News has a video from Met Office weather forecaster Louise Lear on the US tornadoes.

Date Created
April 2011

One day to go to the Royal Wedding and what's the weather forecast?

Description

The Royal Wedding of HRH Prince William and Catherine Middleton will be celebrated in London and throughout the country tomorrow.

The weather will play its part in the big day and the latest Royal Wedding forecast is for a mixture of sunshine and showers.

Andy Page, Chief Forecaster at the Met Office, said: "After a cloudy start to the day, with a 10% chance of a shower, we should see some sunny spells developing over London during the morning. The chance of a shower increases to 30% for the London area around lunchtime as temperatures reach 17 Celsius".

Elsewhere across the country there is the risk of heavy showers, some thundery, breaking out in the afternoon. So anyone holding street parties and other outdoor celebrations should keep up to date with our latest weather forecast.

Date Created
April 2011

Royal Wedding Update: Wednesday 27 April

Description

In the London area, a return to more typical April weather is likely, with a mix of showers and at times brighter spells. The best of the drier weather is likely through the morning.

Much of Scotland, Northern Ireland and northern England staying fine and mostly dry, with the best of the weather in the north and west. Generally cloudier for the rest of England and Wales though some sunny intervals are also likely. Showers are likely to develop over central and southern areas, with the focus of these tending to move westward through the day, though some could also break out again in the southeast later.

Date Created
April 2011

Met Office in the Media: 27 April 2011

Description

The Daily Express reports in 'Drivers warned as pollen cloud menace heads for UK' about an **increased risk of Birch pollen heading toward the UK** from the continent as northeasterly winds set in across the UK. Birch pollen is also at it's peak in the UK at present causing an increased risk to Hay Fever sufferers. However pollen forecasts are now available on the Met Office website to help sufferers manage their condition.

Met Office Pollen Calendar

Image not found or type unknown
Met Office Pollen Calendar (click to enlarge)

The Independent reports on the weather for the upcoming **royal wedding**. Following the fine weather over Easter, our weather has returned to more typical weather for this time of year with a mix of April showers and some brighter weather too. The best chance of brighter conditions will be in the morning, with temperatures reaching 18 degrees Celsius.

Related Articles

- Met Office comes to the rescue as hay-fever sufferers wilt in heat (independent.co.uk)

Date Created
April 2011

25 years on from Chernobyl

Description

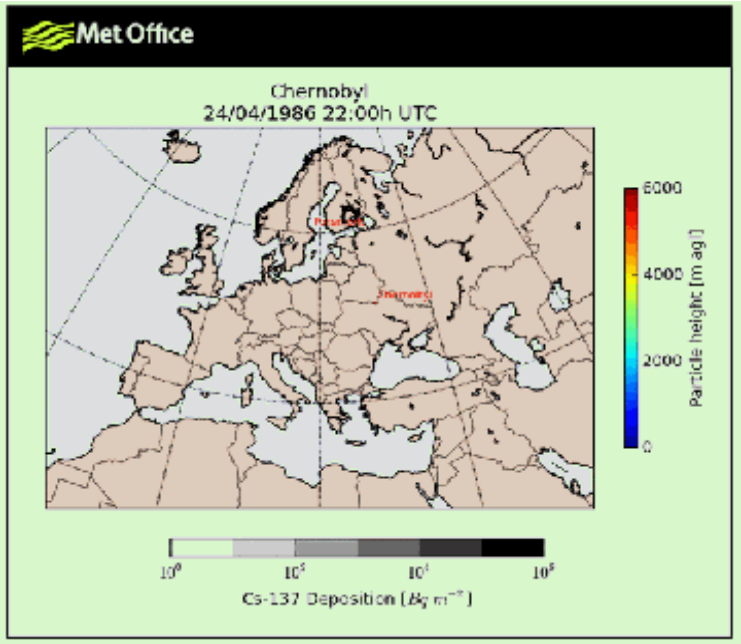
Twenty-five years on from the Chernobyl accident on April 26th 1986, the impacts of the devastating explosion in the number 4 reactor at the Chernobyl plant continue to be felt in the region and beyond and have been brought into focus again as the crisis at the Fukushima nuclear reactor following the earthquake and Tsunami in March 2011.

Here we look at how the Chernobyl accident led to the development of the Met Office's emergency-response dispersion model NAME, and how this has been developed into one of the most flexible and sophisticated atmospheric dispersion models in the world.

At 01:23:44 on 26th March 1986, four seconds into the attempted emergency shutdown, an explosive rise in steam pressure within the reactor lifted the massive shield above it, exposing the core of the reactor to the atmosphere. With the core now exposed, a second enormous explosion blew the reactor building apart.

The Soviet authorities organised a mammoth fire-fighting effort to contain the radioactive debris, using military helicopters to dump 5000 tonnes of sand onto the reactor's remains. Releases into the atmosphere continued for ten days following the initial explosion with an estimated 4% of the radioactive core escaping. Most of this contaminated material affected Belarus and the Ukraine – it has been estimated that five million people were exposed to radiation in these areas.

Although much of the radioactivity was deposited in the region around Chernobyl, some contaminated debris would inevitably spread further afield. In the outside world, the first indication of the disaster came from Sweden when automatic radiation monitoring instruments at a nuclear power station near Stockholm sounded the alarm two days later on Monday April 28th. A plume of radioactive material was transported widely across Europe by the evolving weather patterns. The worst affected areas were those locations where rainfall intercepted the plume and washed radioactive particulates to the ground; notably, parts of Scandinavia and Eastern Europe, western parts of the UK and Ireland, and some Alpine areas.



Click on this map to see an animation of dispersion from the Chernobyl accident

The role of the Met Office at the time is described in a contemporary report… *"By Tuesday morning (April 29th) the Central Forecasting Office at Bracknell were calculating forward trajectories starting from Chernobyl using forecast winds calculated at the 850mb pressure level. These trajectories suggested that whilst there was no immediate risk to the UK, there was a possibility that the plume might cross Britain by the end of the week.*

"Late on Wednesday, reports of elevated radiation levels measured at laboratories in northern Italy and in Monaco were received … it became reasonably probable that the winds would carry the plume into Britain on the Friday (May 2nd), and this information was issued on Thursday morning by the Meteorological Office."

The plume migrated across the UK from the south on the Friday and Saturday (May 2nd/3rd). It was rather unfortunate timing that an active depression in the south-west approaches pushed frontal rain northwards in combination with thunderstorm activity advected in from France. Heavy rain washed out the radioactive debris over many parts of the country, the worst-affected areas being upland regions in the north and west of Britain.

One outcome of the Chernobyl incident has been the development of the Met Office's pollution dispersion model NAME.

NAME has continued to be developed and applied to an ever-growing range of atmospheric transport and dispersion problems, ranging from research activities to tracing the sources of greenhouse gases under the Kyoto protocol and from air quality forecasting to numerous emergency response activities such as nuclear/radiological releases (e.g. Fukushima, 2011), volcanic eruptions (e.g. Eyjafjallajokull, 2010), industrial fires (e.g. Buncefield oil depot fire, 2005) and the spread of animal diseases (e.g. Foot and Mouth Disease and Bluetongue). NAME is now one of the most flexible and sophisticated atmospheric dispersion models in the world.

An ability to deliver sound advice for releases of all these types of contaminant requires NAME to be able to represent a wide range of physical and chemical processes and reactions. These include, but are not limited to, particulate and gaseous releases, radioactive half-life decay, radioactive decay chains, gamma radiation cloud shine, chemical reactions, biological virus decay, gravitational sedimentation and dry and wet deposition. When linked to the Met Office's world leading numerical weather prediction model, the Unified Model, it is possible for NAME to predict the spread of atmospheric contaminants over distances ranging from a few hundred metres to the entire globe. This enables the Met Office to help inform and advise emergency responders, health protection agencies, government and the international community for events anywhere on the planet.

Internationally the Met Office is a Regional Specialized Meteorological Centre (RSMC) and a contributor to the Comprehensive Test Ban Treaty Organisation (CTBTO). As an RSMC, the Met Office, using NAME, can be called upon by any country in the European or African regions during a major atmospheric pollution incident under the World Meteorological Organisation's (WMO) Emergency Response Activities Programme – one aspect of the Met Office's wider international role as an RSMC. For incidents outside of this region, the Met Office continues to provide predictions but in support of the relevant lead RSMC.

For radiological incidents (e.g.Fukushima, 2011) the Met Office response, along with those of the other RSMCs, is coordinated through the International Atomic Energy Agency (IAEA). The CTBTO maintains a global network of detectors that monitor for radioactive substances that would be released during a nuclear detonation. If a substance is detected, the Met Office, using NAME, is able to show where the contaminant may have come from. By combining model results from several sensors it is then possible to identify the location where the radiological contaminant was released into the atmosphere.

More information on NAME and its full range of uses can be found on the Met Office website.

Date Created
April 2011

Royal wedding weather forecast

Description

HRH Prince William and Kate Middleton

Image not found or type unknown

As the big day gets closer we can now start to give more detail on what the weather will be like on Friday for the Royal Wedding of HRH Prince William and Kate Middleton. The Met Office has a special royal wedding weather forecast page that will be updated every day with the latest forecast and we are also providing a video forecast on our YouTube Channel.

Following the fine Easter weekend the weather this week is likely to be cooler and a little more unsettled. The wedding is still 3 days away so it is important to stay up to date with the forecast, but currently we are expecting some rain through the early hours of Friday, but this should clear to leave a cloudy but drier morning. Some bright or sunny spells may break through, possibly leading to further showers. A brisk northeasterly wind could make it feel rather chilly whenever the sun goes in.

Elsewhere across the country we are expecting fine and dry conditions in Northern Ireland and Scotland with a good deal of brightness, and the best of the sunshine across Scotland. However it may be generally cloudier in England and Wales, but sunshine should break through at times. Showers or outbreaks of rain are likely to develop over southern and central areas during the day, with the focus of these probably drifting westward through the afternoon. Many areas will be quite windy.

Date Created
April 2011

Met Office in the Media: 26th April 2011

Description

As we head back to work the Met Office can confirm that we have had the **hottest Easter in recent history**. The hottest place over the weekend was Wisley in Surrey where the Met Office recorded a high of 27.8 C on Saturday. Many other parts enjoyed temperatures in the low and mid 20s though it was cooler in the north of England, Scotland and Northern Ireland. The previous warmest Easter was in 1984 when temperatures reach 23.7 C.

‘Met Office comes to the rescue as hay-fever sufferers wilt in heat‘ writes Mike McCarthy in the Independent explaining that Britain’s millions of hayfever sufferers have a new helping hand following the introduction of daily pollen forecasts on our website. The new service, which covers the whole of the UK, represents a step change in the resources available to sufferers. At present, it is updated at noon every day, but it is hoped that the update can be made earlier in the day to give sufferers more time to plan their days.

It gives pollen forecasts for each of the Met Office’s 16 regions, which are available as two-day, three-day and five-day forecasts, updated daily, and a monthly forecast, updated every week.

Yolanda Clewlow, Met Office UK Pollen Network Manager said: “Variable weather conditions across the country mean that levels of pollen often vary greatly from day to day, so it’s important the hay fever sufferers stay up to date with the latest forecast. You may need to take medication in advance of high-count days.”

The Independent (Branson and O'Leary 'were wrong' to deny ash-cloud risk), BBC (Volcanic ash air shutdown the 'right' decision) and Guardian (Concerns for air traffic during volcanic ash cloud were legitimate, say scientists), A new report published this week and completed by the University of Iceland and the University of Copenhagen have shown that i**t was right to close airspace following the eruption of the Iceland Volcano in April 2010**. Airspace closures in Europe potentially averted tragic consequences after Iceland's Eyjafjallajökull volcano shot ash high into the atmosphere in April 2010. Immediately after the eruption, Sigurdur Gislason and colleagues at the University of Iceland collected samples of the ash and sent them to a team led by Susan Stipp at the University of Copenhagen's Nano-Science Center. The Danish researchers analyzed the samples and determined that the costly flight cancellations had likely been warranted. According to the authors, glacial meltwater entered the volcano and cooled the magma, which produced ash particles that were especially fine-grained, hard, sharp, and capable of sandblasting airplane surfaces such as windows and exposed aluminum parts.In addition, the authors estimate that the Eyjafjallajökull ash would have melted at the high operating temperature of most jet engines, potentially caused them to stall. In 1982, all four engines failed on an airliner carrying 263 passengers after the craft flew through an explosive ash cloud over Indonesia.The pilot managed to restart three of the engines and land safely by peering through a small strip ofglass that had avoided scouring. The authors also present a protocol that may help officials assess therisk to aircraft posed by future explosive eruptions.

Related Articles

- Aircraft ash fear 'well founded' (bbc.co.uk)
- Volcanic ash gets its close-up (sciencenews.org)
- New pollen forecasts available online (metofficenews.wordpress.com)
- Met Office comes to the rescue as hay-fever sufferers wilt in heat (independent.co.uk)
- Branson and O'Leary were wrong to deny ash-cloud risk (independent.co.uk)
- You: April set to be warmest on record (guardian.co.uk)
- You: Britain nears 30C over Easter weekend (guardian.co.uk)

Date Created
April 2011

Met Office in the Media: 21 April 2011

Description

The weather for the Easter weekend continues to make the news right now with the Daily Telegraph reporting that 'Britain heading for warmest Easter weekend on record'. It is true that temperatures are well above where they should be – the average temperature in London is usually 14 degrees at this time of year but yesterday we saw 26.5 degrees at Heathrow Airport.

As we head into the Easter weekend, the best weather is likely to be across England and Wales, with highs reaching the low 20's. However, the high temperatures may trigger isolated heavy and perhaps thundery showers. Mixed fortunes are expected over Northern Ireland and Scotland, with sunshine but also some showery rain at times and cooler temperatures by Bank Holiday Monday. The latest weather forecast can be found on our website.

As for records, the warmest Easter in the UK in recent years was that of 21st/22nd April 1984, with the warmest day on Easter Saturday 21st April 1984, recording 23.7 C at Heathrow. Maximum temperatures across the southern half of the UK were widely 21 to 22 C.

23.6 C was recorded at Cilfynydd, Mid Glamorgan (S Wales), the highest Easter temperature in Wales in data from 1960.

Easter Sunday 22nd April 1984 was again very warm in the south of the UK, with 23.7 C again recorded at Rumleigh, Devon.

UK Smog Alert – The BBC has also reported on the 'Smog alert in England and Wales', which follows the issuing of a warning from Defra. The high pressure system persisting over the UK is forecast to bring warm and still conditions to the UK over the Easter weekend. These conditions mean it is likely that the UK will experience a high pollution episode this weekend. High pressure tends to trap air near to the surface allowing pollution levels to build up and with little wind there is not a great deal to move this around.

The Royal Wedding also remains of interest with the BBC looking ahead in 'Royal wedding: What's the weather forecast?'. It is still too early to say what the weather will be like in a weeks time, but you can stay up to date with our extended forecast for the 6 to 15 day period. We will be providing a more detailed forecast on our Royal Wedding weather page from early next week and will also be providing video forecasts on the Met Office YouTube Channel.

Related Articles

- Britain heading for warmest Easter weekend on record (telegraph.co.uk)
- Easter set for sizzling weather (guardian.co.uk)
- Britain Easter weather: Mercury hits 26C and hot weather all weekend (dailymail.co.uk)
- Weekend a roaster as April high looms (thesun.co.uk)

Date Created
April 2011

Defra puts UK on Smog alert

Description

The high pressure system persisting over the UK is forecast to bring warm and still conditions to the UK over the Easter weekend. These conditions mean it is likely that the UK will experience a high pollution episode this weekend. High pressure tends to trap air near to the surface allowing pollution levels to build up and with little wind there is not a great deal to move this around.

The Department for Environment, Food and Rural affairs is responsible for air quality across the UK. Defra have said that elevated levels of PM_{10} and ozone reaching high or moderate are expected from now until at least Sunday. The forecast is therefore for high pollution for PM_{10} and ozone across England and Wales, and low for other pollutants over the weekend.

Some people are more sensitive to ozone than others and may begin to notice an effect on their breathing. People with asthma are not necessarily more sensitive but, if affected, can use their 'reliever' inhaler. The public are urged to take sensible precautions such as:

- avoiding exercise outdoors in the afternoon can reduce exposure to ozone; and
- avoiding making unnecessary short car journeys wherever possible can reduce the formation of ozone.

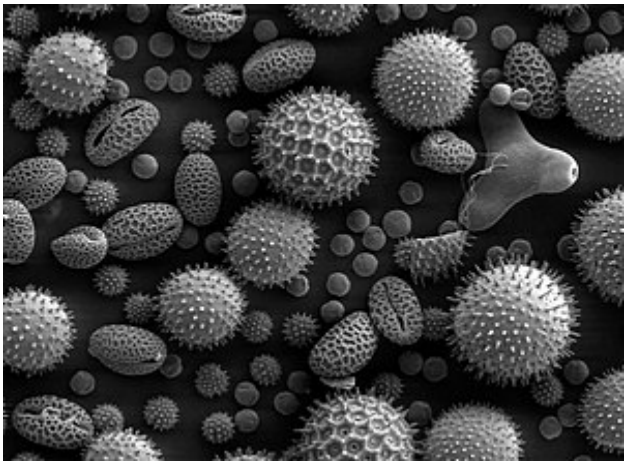
Regular updates on levels of particulate matter (PM_{10}), sulphur dioxide, nitrogen dioxide, ozone and carbon monoxide are available at: uk-air.defra.gov.uk (UK Air Information Resource) and from Defra's freephone helpline (0800 556677), which also offers health advice to those who may be particularly sensitive to air pollution.

More information on the Smog can be obtained from Defra at
http://www.defra.gov.uk/news/2011/04/21/summer-smog/

Date Created
April 2011

New pollen forecasts available online

Description



Pollen from a variety of common plants

Pollen forecasts are now available on the Met Office website for the millions of sufferers of hay fever across the UK. The forecasts will use our latest weather forecast information and combine this with pollen readings from across the UK.

UK Pollen Network Manager at the Met Office, Yolanda Clewlow said: “Variable weather conditions across the country mean that levels of pollen often vary greatly from day to day, so it’s important the hay fever sufferer stay up to date with the latest forecast.”

The introduction of the pollen forecast is part of the wide range of weather-related services offered by the Met Office, which also include UV index and Heat Health watch.

Met Office forecasters will be working closely with the University of Worcester and Pollen UK throughout the season.

Find out more about how to help reduce the impact of pollen on your health.

Date Created
April 2011

Met Office in the Media: 20 April 2011

Description

As the fine weather continues across much of the UK the media have focused very much on what the Easter weekend weather will be like and whether the fine and warm spell will last until the Royal Wedding. Of course, it is just too early to give a definite forecast for London for the 29th April, but the Met Office continues to look ahead to the weather for the long weekend coming and beyond.

Today has, once again been the warmest day this year with temperatures reaching 26.2 deg C at Charlwood, Surrey. The fine weather is expected to last into the Easter weekend with many places seeing fine and sunny weather however there will be some low cloud or mist on eastern coasts and the risk of some isolated heavy afternoon showers.

The fine weather we are seeing right now certainly does not mean that it will last all the way through to the Royal Wedding at the end of next week. The Met Office 6 to 15 day forecast provides more information on the extended outlook.

Related Articles

- Britain heading for warmest Easter weekend on record (telegraph.co.uk)
- Easter roaster (thesun.co.uk)
- Britain to sizzle on Easter weekend (mirror.co.uk)
- Britain set to sizzle over the Easter weekend (independent.co.uk)
- Sunshine for the Easter holidays with just a few April showers (telegraph.co.uk)

Date Created
April 2011

Met Office in the News: 13 April 2011

Description

Volcanic Eruption Test – The Met Office in its capacity as the Volcanic Ash advisory Centre London (VAAC London) is taking part in a european wide exercise to test changes and improvements in how the industry deals with volcanic ash incidents. This exercise, a routine twice yearly test, takes place today and tomorrow and is known as “VOLCEX 11/01”. It is organised by ICAO, the International Civil Aviation Organisation.

The exercise will simulate the eruption of the Grimsvötn volcano in Iceland. The Met Office will be operating its Volcanic Ash advisory Centre, providing guidance on expected ash movement across the North Atlantic and across European airspace. The exercise is then expected to test how regulators and airlines deal with the ash.

In the last year the Met Office have worked with the industry and regulator on a number of activities to increase preparedness to meet the challenges of a volcanic eruption of a similar nature as last years happening again. Such work includes:

- Providing a radar in Iceland that can be used to provide more information about any volcanic eruption
- Increasing ground-based and air-borne observations such as mobile lidars, cloud base recorders, aerosol measuring weather balloons and lightning measurements
- Working with the CAA to provide an additional ash measuring aircraft
- Working with the industry to adapt outputs from the VAAC to meet the changing requirements of airlines and the regulators

Fukushima Incident – Ian Sample at the Guardian has written ‘Radiation spreads, but risk to the rest of world low‘. The article describes our role in dispersion forecasting and our role in supporting the international community in relation to the Fukushima incident.

Warm April? – The Daily Telegraph have today reported that this April is currently heading toward being the warmest spring on record. In honesty, it is just too early to say how this April will fair in the record books, however the month has indeed start off very warm with record-breaking minimum temperatures in parts of Northern Ireland, Scotland and Northern England earlier in the month. Our 6 to 15 day forecast, which will cover most of the rest of April is available on our website.

Date Created
April 2011

Met Office in the Media: 11 April 2011

Description

BBC Weather Test – The Sunday Telegraph have run an article 'Test to see if you can trust the weatherman' in which it reports onthe proposed BBC 'Weather Test' – which has been presented as an indpendent, scientific evaluation of the many different weather forecast providers across the UK.

The 'weather test' funded and promoted by the BBC Radio 4 Today programme has recently published a protocol or method on how it proposes to compare different weather forecasters. To go ahead it needs a robust and credible assessment methodology involving a range of weather providers.

The UN's World Meteorological Organisation has measured the Met Office as being amongst the top two weather services in the world, giving the UK public confidence that they are receiving the best possible service from their national weather service – the Met Office.

We welcome the development of comparable verification standards across the industry. This is a complex undertaking and we are keen to ensure a fair comparison for all. We are in discussions with specialist weather providers in the UK on the challenging task of agreeing an operational set of comparable public facing forecasts which they do not currently widely provide.

Jersey Tourism – A number of papers have reported on an apparent row between Jersey and the Isles of Scilly about claims over the 'warmest place in Britain'. The Met Office is not the National Weather Service for the Channel Islands who have their own weather service, and as such does not hold climate statistics for Jersey.

The Met Office has no reason to doubt the claims made by Jersey Tourisim with Jersey's mean temperature being 8.9 C. Climate figures for St Mary's – Isles of Scilly show:

Mean Max Temp = 13.8 C

Mean Average Temp = 11.6 C

Mean Min Temp = 9.4 C

Total Rainfall = 895 mm

Total Sunshine = 1690 hours

Related Articles

- Jersey and Isles of Scilly row over which is 'warmest place in Britain' (telegraph.co.uk)
- Isles of Scilly turn heat on Jersey (guardian.co.uk)

Date Created
April 2011

Saharan dust heads for the UK

Description

A wind storm that developed over northwestern Africa on the 3rd and 4th April left a legacy of Saharan dust in the atmosphere over parts of Western Europe.

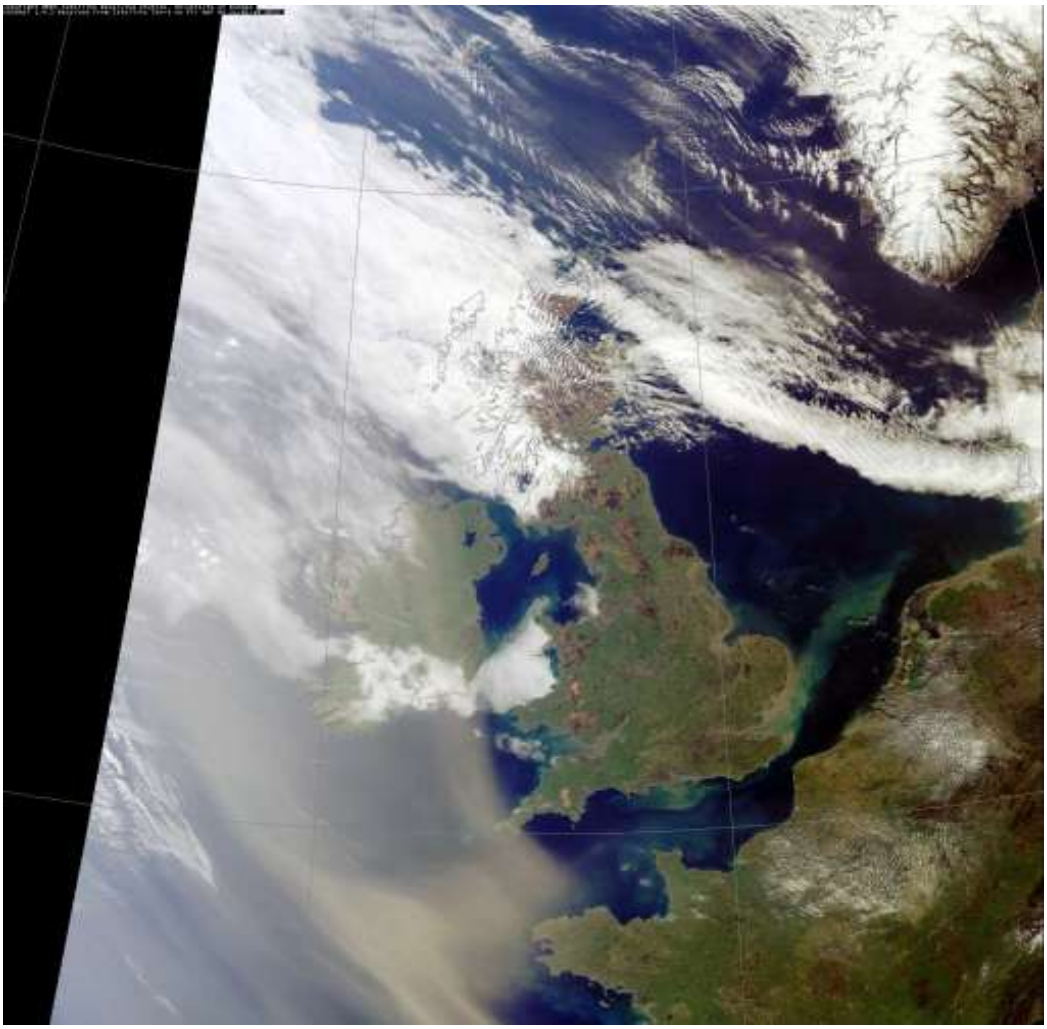
Gusty winds reached 50mph at times over southern Morocco and western Algeria on Sunday and Monday, with the shifting sands of the Sahara thrown into the atmosphere as the sandstorms affected much of the region.

By midweek, the low pressure system that brought poor visibility to parts of Saharan Africa moved away south and weakened – but only after sand particles had been lifted into the air.

South easterly winds over the Sahara took the air borne sand particles eastwards and off the Atlantic coast of Africa. Once here, the Saharan dust was eventually blown by south westerly winds that often cross the Atlantic Ocean and towards the UK.

With conditions over the UK mainly settled thanks to high pressure over the country, dust carried from distant southern shores is stalling over the southwestern approaches of the British Isles at a height of between five and ten thousand feet.

The satellite animation above shows the dust as a bright pink blog over Africa at the start of the sequence, which then moves north to the west of Portugal. At the end of the sequence the dust stretches from Biscay to Brittany and into some western parts of the UK, with the highest concentrations passing over Cornwall. This is expected to give vivid sunsets here for a time until the dust disperses over the coming days.



Satellite image showing the Saharan dust to the south west of the the UK at 1100 GMT on Friday 8th April (source: Dundee SatelliteReceiving Station)

Date Created
April 2011

Record April night-time temperatures

Description

Last night saw some of the warmest April overnight temperatures on record at a number of stations across Scotland and Northern Ireland. These were particularly notable given that they occurred during the first week of the month.

Warm, moist air drawn from south-west in the Atlantic resulted in a very mild night across much of Scotland and Northern Ireland, with some notably high minimum overnight temperatures on 5th / 6th April 2011. Several stations recorded their highest April daily minimum temperatures on record (see Table 1). The very mild air was associated with frontal systems bringing heavy rain to western Scotland (55.2mm at Tyndrum (Highland) in 24 hours to 0900 on 6th) and strong winds, gusting to more than 50 Knots (58 mph) at Edinburgh, Blackford Hill, and Capel Curig (Gwynedd).

The highest April minimum temperature for Scotland is 14.0 °C at Diabaig (Ross & Cromarty) on 17th April 2003.

The highest April minimum temperature for Northern Ireland is 13.9 °C at Belfast, Newforge on 28th April 1994.

Table 1: Minimum temperatures **(0900 5th to 0900 6th April 2011)** breaking previous April records. (Please note that this list is not fully exhaustive.)

Station	Minimum Temperature	Pr
Edinburgh Royal Botanic Garden	13.7 °C	13
Killowen (County Down)	13.6 °C	12
Boulmer (Northumberland)	13.4 °C	12
Stormont Castle (County Down)	13.4 °C	12
Leuchars (Fife)	13.3 °C	12
Ballykelly (County Londonderry)	13.2 °C	12
Dyce (Aberdeenshire)	12.0 °C	11
Machrihanish (Argyll & Bute)	11.7 °C	10

Date Created
April 2011